Introduction

The NCDOT Division Engineers are required by STI legislation to develop a local input methodology for all transportation projects (highway, bike and pedestrian, public transportation, aviation, rail and ferry) within their respective areas that may compete for state funding. In conjunction with our continuous, cooperative and comprehensive planning relationship with local Metropolitan Planning Organizations (MPOs) and Rural Planning Organizations (RPOs), NCDOT Division Engineers have developed the following project solicitation process and local input methodology.

The STI legislation establishes a formula and process by which transportation funding is distributed across the State and across transportation modes. The goal of the STI process is to develop a draft State Transportation Improvement Program. The STI legislation applies uniformly across the State regardless of the boundaries of MPOs, RPOs and MPOs that are TMAs. The STI legislation requires the identification and submittal of potential transportation projects by NCDOT and the MPOs/RPOs, the evaluation of projects according to a quantitative scoring methodology created by a committee of Transportation Stakeholders, and the allocation of qualitative ranking points among certain projects by NCDOT and the MPO/RPO.

Applicability

The project solicitation process will apply to all projects submitted by the Division Engineer, and the local input methodology will apply to all projects (regional impact and division needs and statewide projects that cascade down) to be ranked by the Division Engineer within Division 13's geographic region which includes the counties of Buncombe, Burke, Madison, McDowell, Mitchell, Rutherford, and Yancey. This process also applies to any "Regional Needs" points Division 13, in collaboration with Division 14, awards to a project in Region G. Region G includes the counties within Division 13 as well as counties within Division 14 (Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Polk, Swain, and Jackson Counties).

Schedule Details

Project Solicitation:

Each transportation Division solicited candidate projects for 30 days prior to the February 24th, 2014 project submittal deadline. The results of this process were reviewed with each of the MPOs and RPOs in the Division, appropriate NCDOT Transit Division (all modes) staff, and local aviation, rail and public transit operators prior to submitting new candidate projects. Project suggestions received were shared and coordinated with the respective MPOs and/or RPOs in each Division and with appropriate NCDOT transit division staff (all modes) to avoid duplication and ensure maximum number of project submittals per Division was not exceeded. The Division then

submitted the selected project list using NCDOT's SPOT Online tool (web based system) for quantitative scoring before February 24th, 2014.

Project Ranking:

The Division Engineer will evaluate the full list of new and previously evaluated projects for the Division between May and August 2014, assigning local input points in consultation with the MPOs and RPOs in the division, and appropriate NCDOT Transit Division (all modes) staff for submission to the Strategic Prioritization Office of Transportation (SPOT) by August 29th, 2014.

Public Input Process

Project Solicitation:

Each Division Engineer's office announced the 30 day project solicitation period to all governments, MPOs, RPOs, NCDOT staff, local airport, rail and transit operators, and interested persons in the Division's geographic boundaries using methods approved by the NCDOT Communications Office. In addition, each Division hosted a public workshop at a central location within each Division during the 30 day project solicitation period. Information regarding the public hearing, and specific methods for providing input (email, phone, mail, etc.) were advertised to stakeholders using methods approved by the NCDOT Communications Office. Comments received via public hearings and other methods approved by the NCDOT Communications Office were posted to the NCDOT website. The results of the 30 day project solicitation period and the public input received were reviewed by the Division Engineer in consultation with the MPOs and RPOs in the Division, appropriate NCDOT transit division staff, and local aviation, rail and transit operators. Through this collaboration, the Division Engineer determined the list of candidate projects to submit for technical evaluation, while avoiding duplicate project submissions and ensuring that the

maximum number of project submittals was not exceeded. The Division Engineer was able to submit new transportation projects (across all modes) based upon the P3.0 Workgroup and Department's agreed upon allowances.

Project Ranking:

The Division Engineer will receive the quantitative scores for the projects eligible for local input points in May of 2014. The Division Engineer will be responsible for assigning local input points to regional impact and division needs projects for their area (statewide mobility projects will be evaluated based solely on their technical scores with the exception of those that cascade down into regional and division tiers). The Division Engineer will publish his local input methodology which will be used as the basis to assign preliminary points to all regional impact and division needs projects within his division and/or adjacent divisions using methods approved by the NCDOT Communications Office. Each Division Engineer's office will then announce a new 30 day comment period to solicit input on this information and the preliminary local input point assignments and provide specific methods for providing input (email, phone, mail, etc.) as

approved by the NCDOT Communications Office. The 30 day comment period will vary by Division, and will take place during the 90 day window (June 2-August 29, 2014) for assigning local input points. During this period, each Division will host public drop-in/workshop sessions at a central location within each Division. Advertisement soliciting input during the 30 day comment period, and for the drop-in/workshop sessions, will be made to the public, and to MPOs, RPOs, NCDOT staff, local airport, rail and transit operators, and interested persons in the Division's geographic boundary using methods approved by the NCDOT Communications Office.

The Division Engineer will review comments received in accordance with his local input methodology and in consultation with the MPOs and RPOs in the Division, appropriate NCDOT Transit Division (all modes) staff, and local aviation, rail and transit operators.

Through this evaluation and collaboration, the Division Engineer will determine the final local input point assignments per eligible regional impact and division needs project within their division and/or to projects in adjacent divisions to submit for final evaluation. All final point assignments will be published using methods approved by the NCDOT Communications Office.

Ranking Process

Introduction:

The criteria outlined below will be used to create a ranking of projects in the regional

impact and division needs categories that will be used by the Division Engineer in determining preliminary and final local input point assignments for projects within the division and/or to projects in adjacent divisions. The Department's quantitative scores for projects and this ranking process will act as a guide and first step in determining a preliminary rank-ordered list of projects.

The second step is to apply the Division Methodology to all projects in the preliminary rankordered list of projects. This application may reorder the ranking of the projects. The third step is to apply qualitative points to specific projects according to the methodology outlined later.

Below is a list of criteria used in developing a set of ranking criteria for Division 13. For each criterion, a detailed description is provided (including any pertinent information regarding data sets to be used). A standard set of ranking criteria has been provided to each Division Engineer for use in the regional impact and division needs ranking processes, and each Division Engineer will determine the combination of criteria that is most reflective of the needs and priorities for their respective area. The Division 13 Engineer selected and weighted criteria from the standardized list. Each Division Engineer will publish their specific set of criteria using methods approved by the NCDOT Communications Office prior to/in conjunction with posting preliminary point assignments for projects within their division and/or to projects in adjacent divisions.

Division 13 Criteria – Descriptions:

- Existing Congestion: a measure of the volume/capacity ratio of a facility or transit service taken from SPOT data.
- **Safety Score**: a calculation based on the crash frequency and severity along sections of a particular roadway. The safety score is the score generated in the quantitative scoring process and is calculated in accordance with the SPOT calculation.
- **Cost Effectiveness**: a calculation of the cost per vehicle to improve a road one mile. This calculation allows different types of roads to be compared based on how much it costs to improve the road per individual vehicle.
- **Freight Volume**: the number of trucks or equivalent vehicles that utilize the facility on a daily basis. Percentage of truck volume of average daily traffic converted to a number of trucks or equivalent.
- **Transportation Plan Consistency**: a yes or no question to determine if the proposed project is found in an existing adopted transportation plan for the area.
- Corridor Continuity: a measure of the project completing or continuing

improvements on a defined transportation corridor.

• **Multimodal Accommodations**: a yes or no measure of the incorporation of pedestrian, bicycle or transit elements into a project.

Regional Impact Ranking:

Certain projects are scored at the regional impact level, as well as any projects that cascade into the regional impact category from the statewide mobility category.

Below is a ranking of criteria used by the Division Engineer in evaluating projects in the regional impact category. The Division Engineer determined the combination of criteria and criteria weights that best reflect the needs and priorities of his respective area and the specific criteria and weights for Division 13 are noted below. The resulting scores and rank order will be used by the Division Engineer in developing preliminary and final local input point assignments for projects within his division and/or to projects in adjacent divisions. The Department's quantitative scores for projects and this ranking process will act as a guide and first step in determining a preliminary rank-ordered list of projects. Each Division Engineer will use the preliminary rank-ordered list of projects along with local knowledge as well as information gathered through collaboration and consultation with MPOs, RPOs, local airport, rail and transit operators and input from other interested stakeholders to determine the actual assignment of qualitative points.

| Regional Impact Standard Ranking – Criteria and Weights (Note: Choose minimum of four criteria and determine percent weights; total points for any given project cannot exceed 10 Points will be weighted to equal a maximum of 100 points per project. | | | | | | | | | |
|--|--|--|---|---|-----------------------------------|--|--|--|--|
| Criteria | 0 Points | 10 Points | 20 Points | 30 Points | 40 Points | | | | |
| Existing Congestion | Volume to capacity less than 0.5 | | Volume to capacity between 0.76 and 0.9 | Volume to capacity between 0.91 and 1.0 | Volume to Capacity over 1.0 | | | | |
| 20% weight Safety Score | SPOT safety points less | SPOT safety | SPOT safety points | SPOT safety points greater | | | | | |
| 20% weight | than 30 | between 31-50 | between 51-65 | than 66 | | | | | |
| Cost Effectiveness | Cost per Veh./equivalent greater than \$1500 per mile | | Cost per Veh./equivalent between \$500-\$999 per | Cost per Veh/equivalent less than \$499 per Mile | | | | | |
| 20% weight | \$1500 per nine | | mile | 7433 per iville | | | | | |
| Freight Volume | Less than 500 trucks/ equivalent | 1000 trucks/ | More than 1000 trucks/ equivalent per | | | | | | |
| 10% weight | per day | day | day | | | | | | |
| Transportation Plan Consistency 10% weight | Project is not in CTP of TP | Project is in CTP or TP | | | | | | | |
| Corridor Continuity 10% weight | Project does not complete of continue corridor improvement | Project does continue corridor improvement | | | | | | | |
| Multimodal Accommodations 10% weight | Project does not include ped/bike/ transit | Project does include ped/bike/ transit facilities | | | | | | | |

Division Needs Ranking:

facilities

10% weight

Certain projects are scored at the division needs level, as well as any projects that cascade into the division needs category from the regional impact and statewide category. The Division Engineer will use the criteria and weighting below to generate a score for each project and a ranking of all projects in the division needs category.

Below is the ranking of criteria used by the Division Engineer in evaluating projects in the division needs category. Each Division Engineer will determine the combination of criteria and criteria weights that best reflect the needs and priorities of their respective area and the specific criteria and weights for Division 13 are noted below. The resulting scores and rank order will be used by the Division Engineer in developing preliminary and final local input point assignments for projects within their division and/or to projects in adjacent divisions. The Department's quantitative scores for projects and this ranking process will act as a guide and first step in determining a preliminary rank-ordered list of projects. Each Division Engineer will use the preliminary rank-ordered list of projects along with local knowledge as well as information gathered through collaboration and consultation with MPOs, RPOs, local airport, rail and transit operators and input from other interested stakeholders to determine the actual assignment of qualitative points.



Division Needs Standard Ranking – Criteria and Weights

(Note: Choose minimum of four criteria and determine percent weights; total points for any given project cannot exceed 100)

Points will be weighted to equal a maximum of 100 points per project.

| Criteria | 0 Points | 10 Points | 20 Points | 30 Points | 40 Points |
|--|--|---|--|---|--|
| Existing Congestion 20% weight | Volume to capacity less than 0.5 (roads and rail), existing facilities available (other modes) | Volume to Cap. between 0.51 and 0.75 (roads and rail), intermittent or incomplete facilities/ transit available (other modes) | Volume to capacity over 0.75 (roads and rail), no facilities/transit available (other modes) | | |
| Safety Score 20% weight | Spot safety points less than 30 | Spot safety points between 31 and 50 | Spot safety points between 51 and 65 | Spot safety points between 66 and 80 | Spot safety points greater than 80 |
| Cost Effectiveness 20% weight | Cost per daily user greater than \$4,000 per user per | Cost per daily user between \$2,000-\$4,000 per user per | Cost per daily user between \$1,500-\$1,999 per user per | Cost per daily user between \$1,000-\$1,499 per user per | Cost per daily user less than \$999 per user per unit per |
| Transportation Plan Consistency 20% weight | unit per mile Project is not in adopted land use, transportation, transit or other plan | unit per mile Project is in an adopted land use, transportation, transit or other plan | unit per mile | unit per mile | mile |
| Multimodal Accommodations 20% weight | Project does not include bike/ped/ transit facilities | Project includes bike/ped/ transit facilities | | | |

The result of the application of the ranking methodology will be a list of projects in priority order. The next step is to assign the Division's qualitative points to specific projects. Division 13 has 2000 points to allocate among Regional projects and 2000 points to allocate among Division projects.

For the Division's 2000 Regional points, points will be assigned among modes and project types according to the following target allocation:

- 1600 points to Highway
- 400 points to any transportation mode (20% of overall points)

For the Division's 2000 Division points, points will be assigned among modes and project types according to the following target allocation:

- 1600 points to Highway
- 400 points to any transportation mode (20% of overall points)

The intent is to assign points within each mode and project type in order of the rankings from above. However exceptions may be made if the project costs more than the funding available in that category or if the project will not be competitive within the specific category even with the application of qualitative points or if the project will remain competitive in the absence of assigning qualitative points.

The specific reasoning behind the allocation of qualitative points will be documented by Division 13 and posted to NCDOT's website.

During the period that the draft point assignment is released for public comment, Division 13 may make further adjustments to the qualitative point assignment recommendation based on the above factors as well as:

- coordination with the MPOs and RPOs on the assignment of points; and
- public input and support as evidenced through public comments submitted to NCDOT, Division 13's public workshop and public involvement efforts of local governments.
- the project development status of a project (i.e. how far along a project is in the environmental analysis phase) relative to other projects competing for funding.

Approval of Ranking Points

Division 13 will announce a 30 day comment period that will take place during the 90 day window (June 2-August 29, 2014) for assigning local input points. During this time, Division 13 will release the draft Project Priority Ranking and application of qualitative points for public comments and hold a public workshop. After review and public comment, Division 13 will finalize the application of qualitative points and that will be informed by:

- the number of eligible projects within the Division within each funding mode /project type/category;
- the likelihood of receiving funding through STI considering the amount of funding available within each Division or Region, historical funding levels for the mode, and the normalization limitations that have been adopted;

- the effect that receiving funding for a project may have on the likelihood of other projects being funded in the Division or Region considering the parameters set by the STI legislation;
- geographic and jurisdictional balance;
- coordination with the MPOs and RPOs on the assignment of points;
- public input and support as evidenced through public comments submitted to NCDOT,
 Division 13's public workshops, and public involvement efforts of local governments;
- Division Engineer's knowledge of the transportation needs of their Division; and other factors as identified.

If the Division varies from the recommended allocation of qualitative points, the reasoning will be documented and posted on NCDOT's website.

It is important to recognize that NCDOT does not have enough revenue available to complete all the projects analyzed through the STI process or to meet all of the state's transportation needs. Additional revenue must be secured to fully address the growing demands on our infrastructure, and working toward identifying and implementing potential funding solutions remains one of the Department's top priorities. STI will allow us to use our existing resources more efficiently and effectively and help us move forward with important projects that will enhance mobility and revitalize communities throughout the state. The new process encourages us to think from a statewide and regional perspective while also providing flexibility to address local needs. With this in mind, it is important now more than ever to coordinate with all of the key stakeholders in Division 13.

The following is a list of the Division 13 Key Stakeholders:

Metropolitan Planning Organizations (MPOs): French Broad River MPO, Greater Hickory MPO

Rural Planning Organizations (RPOs): High Country RPO, Isothermal RPO, Land of Sky RPO, Unifor RPO

<u>PUBLIC TRANSIT</u>: Asheville Redefines Transit (ART), Greenway Transit, Madison County Transportation Authority, McDowell County Transportation Planning Inc., Mitchell County Transportation Authority, Mountain Mobility, Rutherford County Transit, Western Piedmont Regional Transit Authority, Yancey County Transportation Authority

<u>AIRPORTS:</u> Asheville Regional Airport, Foothills Regional Airport (Morganton-Lenoir Airport), Rutherford County

RAILROADS: Norfolk Southern Railroad, CSX Transportation

COUNTY GOVERNMENTS

Buncombe County, Burke County, Madison County, McDowell County, Mitchell County, Rutherford County, Yancey County

LOCAL GOVERNMENTS

Buncombe County: Asheville, Biltmore Forest, Black Mountain, Montreat, Weaverville, Woodfin

Burke County: Connelly Springs, Drexel, Glen Alpine, Hildebran, Morganton, Rhodhiss,

Rutherford College, Valdese

<u>Madison County:</u> Marshall, Mars Hill, Hot Springs

<u>McDowell County:</u> *Marion, Old Fort* <u>Mitchell County:</u> *Bakersville, Spruce Pine*

Rutherford County: Bostic, Chimney Rock, Ellenboro, Forest City, Lake Lure, Ruth,

Rutherfordton, Spindale
Yancey County: Burnsville

NCDOT STAKEHOLDERS:

NCDOT Bike & Pedestrian Division

NCDOT Rail Division

NCDOT Division of Public Transportation

NCDOT Division of Aviation NCDOT Transportation Planning Branch